

REMARKS

In the February 20, 2007 Office Action, the Examiner noted that claims 28-38, 41, 43, 45-49, 52, 54-57, 60 and 63-76 were pending in the application; rejected claims 70-72 and 75 under 35 USC § 101; rejected claims 28-30, 41, 43, 45, 63, 66, 68-70 and 73 under 35 USC § 102(e); and rejected claims 31-34, 37, 38, 46-49, 52, 54-57, 60, 75 and 76 under 35 USC § 103(a). In rejecting the claims, U.S. Patents 6,101,543 to Alden et al. (Reference A in the February 20, 2007 Office Action); 5,651,006 to Fujino et al. (Reference A in the February 27, 2004 Office Action); and 5,678,006 to Valizadeh et al. (Reference A in the July 6, 2005 Office Action) were cited. Claims 28-38, 41, 43, 45-49, 52, 54-57, 60 and 63-76 are pending and under consideration.

Rejections under 35 USC § 101 and Request for Interview

On pages 2-3 of the February 20, 2007 Office Action, claims 70-72 and 75 were rejected under 35 USC § 101 as directed to unpatentable subject matter by construing apparatus and system claims as "directed to software per se, which is not statutory." It is not understood how "a programmed processor" in "[a]n apparatus" as recited in claim 70, or "[a] communication system" as recited in claim 75, can be considered "software per se" as asserted in the February 20, 2007 Office Action. The citation of a definition for "processor" in the field of "software" in the IEEE Authoritative Dictionary does not support this rejection. Claims must be examined as a whole and words taken in context. The IEEE Authoritative Dictionary does not define a "programmed processor" as software. Therefore, as the only recited element of an apparatus or communication system, it is submitted that the "programmed processor" recited in claims 70-72 and 75 **cannot** "reasonably be interpreted as being directed towards software per se" as asserted in the February 20, 2007 Office Action.

In an effort to avoid the unreasonable interpretation of the February 20, 2007 Office Action, claims 70, 72 and 75 have been amended to recite a "programmed processing device" instead of a programmed processor. The two terms are considered synonymous in the context of apparatus and communication system claims and thus, these amendments are not made to affect patentability. If the Examiner believes that the term "programmed processing device" can reasonably be interpreted as "software per se," the Examiner is respectfully requested to contact the undersigned by telephone **prior to issuing another Office Action**, to arrange an interview for the purpose of finding claim language that will not be interpreted in this manner.

Rejections under 35 USC § 102(e)

On pages 3-8 of the February 20, 2007 Office Action, claims 28-30, 41, 43, 45, 63, 66, 68-70 and 73 were rejected under 35 USC § 102(e) as anticipated by Alden et al. The independent claims have been amended by incorporating some of the limitations recited in claims 35, 52, 54, 64, 67, 71 and 74 to clarify that "the digital message ... [is encoded] to form an encoded message ... [in] an encoding format of a simple network management protocol" (e.g., claim 1, lines 3-5). Since none of claims 35, 52, 54, 64, 67, 71 and 74 were rejected as anticipated by Alden et al., it is submitted that the rejection under 35 USC § 102(e) should be withdrawn as a result of the amendment of the independent claims.

Rejections under 35 USC § 103(a)

On pages 8-16 of the February 20, 2007 Office Action, claims 31-34, 37, 38, 46-49, 52, 54-57, 60, 75 and 76 were rejected under 35 USC § 103(a) as unpatentable over Alden et al. in view of Fujino et al. and claims 35, 36, 64-67, 71, 72 and 74 were rejected under 35 USC § 103(a) as unpatentable over Alden et al. in view of Valizadeh et al.

The newly cited Alden et al. relates to establishing secure virtual private networks, especially in a communication according to the TCP/IP network protocol. Specifically, Alden et al. discloses a solution for users wishing to establish a communication tunnel in a mobile computing environment. To do so, a dynamically allocated IP address is requested from an Internet Service Provider (ISP), as described at column 2, lines 33-39.

As discussed in the Amendment filed August 27, 2004, Fujino et al. is directed to a hierarchical organization of SNMP managers and agents. Similarly, Valizadeh et al. is directed to a network switch 100 having network management agent functions distributed among trunk and service modules as illustrated in Fig. 2 of Valizadeh et al.

In rejecting claims 52 and 54 it was implied that the mere mention of SNMPv1 at column 2, lines 48-52 of Fujino et al. was sufficient to combine Fujino et al. with Alden et al. The only other reason found for combining Alden et al. and Fujino et al. was "because it would allow for managing a large-scale communication network" (February 20, 2007 Office Action, page 9, lines 1-2). It is submitted that this is not sufficient to establish *prima facie* obviousness of the independent claims which now recite SNMP encoding, because SNMP encoding is not limited to use in a large-scale communication network. As an example of the requirements for *prima facie* obviousness, see *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 127 SCt 1727, 167 LEd2d 705 (U.S. 2007).

In rejecting claims 35, 64, 67, 71 and 74, it was asserted that it would be obvious to combine Alden et al. and Valizadeh et al., because use of SNMPv1 "allows network management systems to monitor network-attached devices for conditions that warrant administrative attention" (February 20, 2007 Office Action, page 15, lines 12-13). However, the claims are not directed to monitoring network-attached devices. Therefore, even if the statement quoted in this paragraph is true, it is not understood why one of ordinary skill in the art would look to Valizadeh et al. to modify Alden et al. to obtain a method, apparatus or system as recited in the independent claims.

As known in the art and described in paragraph [0004] of the application, the simple network management protocol version 1 or SNMPv1

has been the most widespread protocol for monitoring and supervision of network components over local computer networks (Local Area Networks, LANs) as well as over global networks (Wide Area Networks, WANs). The SNMPv1 is arranged above the Internet protocols of user datagram protocol (UDP) and Internet protocol (IP) in the framework of the OSI Communication Layer system. Both the UDP and the IP exhibit substantial weaknesses in the area of security, since security mechanisms are hardly integrated, or not at all integrated, in these protocols.

Furthermore, as discussed in paragraph [0014] of the application, although SNMP version 2 (SNMPv2) initially provided various security measures, the administration of cryptographic keys was so involved that SNMPv2 proved incapable of prevailing in the marketplace over the SNMPv1 despite considerably greater possibilities for the administration of computer networks. As a result, the original SNMPv2 standard was replaced by a modified standard in which no security was integrated.

Thus, despite the need to improve security of SNMPv1 that was acknowledged in the original SNMPv2, no prior art has been cited by the Examiner or is known to the applicants that suggests performing the methods recited in claims 28-31 or the other implementations of the invention recited in the other independent claims. The mere existence of systems like those disclosed in Fujino et al. and Valizadeh et al. that use SNMP does not make it obvious to modify the system taught by Alden et al. to use SNMP. In light of the clear desire in the prior art for a way of increasing security of SNMP communications as provided by the invention, a clearer motivation to modify Alden et al. is required than is provided by what is disclosed in Fujino et al. and Valizadeh et al.. The cited patents neither disclose nor hint at security provided by the claimed invention without implementation of a new or modified network protocol.

For the above reasons, it is submitted that all of the claims patentably distinguish over Alden et al., Fujino et al. and Valizadeh et al. in any combination that would be obvious to one of ordinary skill in the art when the application was filed. Therefore, withdrawal of the rejections is respectfully requested.

Summary

For the reasons set forth above, it is submitted that claims 28-38, 41, 43, 45-49, 52, 54-57, 60 and 63-76 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: June 20, 2007

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